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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,154	02/12/2004	Yu-Bang Fu	112.P77189	2153

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BERKELEY LAW & TECHNOLOGY GROUP, LLP
17933 NW Evergreen Parkway, Suite 250
BEAVERTON, OR 97006

EXAMINER
CHEN, CHIA WEI A

ART UNIT	PAPER NUMBER
2622	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/708,154	FU ET AL.	
	Examiner	Art Unit	
	Chia-Wei A. Chen	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *27-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *27-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 April 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 27-38, 42-47, 49-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Miki et al. (US 6,101,339).

As to claim 27, Miki et al., in figure 13, teaches an apparatus, comprising:

- a strobe module (light emitter 19) capable of providing light;
- a power supply capable of supplying power to the strobe module (batteries 3); and
- a port (contact pins 2a) capable of connecting and transmitting power from the power supply to an external image-capturing apparatus (camera body 1) (col. 9, lines 16-24, col. 8, lines 31-35).

As to claim 28, Miki et al. teaches the apparatus of claim 27, wherein the strobe module is capable of providing light when the image-capturing apparatus captures an image (col. 9, lines 38-43).

As to claim 29, Miki et al. teaches the apparatus of claim 27, and inherently teaches further comprising a transformer capable of transforming an output voltage of the power supply into a standard voltage of the strobe module (The power source of Miki et al. is connected to a power supply circuit that that in turns supplies electric power to different components of the external module; col. 5, lines 17-21)

As to claim 30, Miki et al. teaches the apparatus of claim 27, further comprising a transformer (power supply circuit 12) capable of transforming an output voltage of the power supply into a standard voltage of the image-capturing apparatus (col. 8, lines 28-30).

As to claim 31, Miki et al. teaches the apparatus of claim 27, further comprising a signal port (contact pins 2a) capable of receiving signals from the image-capturing apparatus (col. 8, lines 31-35; broken lines 14, 15, 16 of Fig. 13 indicate electrical connections between the external flash and the camera body – col. 9, line 26)

As to claim 32, Miki et al. teaches the apparatus of claim 31, wherein the signals comprise a driving signal capable of driving the strobe device to provide light (It is possible to send an instruction from the CPU 13 through the connection indicated by the broken line 16 to the light emission controller 18 to emit flash light; col. 9, lines 38-43).

As to claim 33, Miki et al. teaches the apparatus of claim 27, wherein the strobe module comprises a housing (housing 17) and wherein the power supply is disposed within the housing (Fig. 13; col. 9, lines 30-31).

As to claim 34, Miki et al. teaches the apparatus of claim 27, further comprising:

- a housing (flash housing 17), wherein the strobe module (light emitter 19) and the power supply (batteries 3) are disposed in the housing; and
- teaches a transformer (power supply circuits) in the housing and electrically connected to the power supply, the strobe module, and the port, wherein the transformer is capable of transforming an output voltage of the power supply into a standard voltage of the strobe module and outputting file standard voltage of the strobe module to the strobe module, and wherein the transformer is further capable of transforming the output voltage of the power supply into a standard voltage of the image-capturing apparatus and outputting the standard voltage of the image-capturing apparatus to the image-capturing apparatus via the port (Miki et al. teaches that the batteries are connected to a power supply circuits that supply electric power to the different components.)

As to claim 35, Miki et al. teaches, in figure 13, a system, comprising:

- a strobe module (light emitter 19) in a strobe housing capable of providing light;
- a first power supply (battery 3) in the strobe housing capable of supplying power to the strobe module;

- a first power port (contact pins 2a) in the strobe housing;
- an image-capturing apparatus (camera body 1) external to the strobe module, comprising:
- a second power port (circuit board provided inside the camera body) in a housing of the image-capturing apparatus, the second power port capable of connecting to the first power port mad receiving power from the first power supply (col. 8, lines 33-34); and
- a first signal port (contact board provided inside the camera body) in the housing of the image-capturing apparatus, the first signal port capable of transmitting signals to a second signal port (contact pins 2a) in the strobe housing (broken lines 14, 15, 16 in Fig. 13 are also used to indicate electrical connections, i.e., ports between the external strobe device and the external image-capturing apparatus; col. 9, lines 16-45).

As to claim 36, Miki et al. teaches the system of claim 35, wherein the strobe module is capable of providing light when the image-capturing apparatus captures an image (col. 9, lines 38-43).

As to claim 37, Miki et al. teaches the system of claim 35, and inherently teaches further comprising a transformer in the strobe housing capable of transforming an output voltage of the first power supply into a standard voltage of the strobe module (The power source of Miki et al. is connected to a power supply circuit that that in turns

supplies electric power to different components of the external module; col. 5, lines 17-21).

As to claim 38, Miki et al. teaches the system of claim 35, and inherently teaches further comprising a transformer in the strobe housing capable of transforming an output voltage of the first power supply into a standard voltage of the image-capturing apparatus (The power source of Miki et al. is connected to a power supply circuit that that in turns supplies electric power to different components of the external module; col. 5, lines 17-21).

As to claim 42, Miki et al. teaches the system of claim 35, wherein the signals comprise a driving signal capable of driving the strobe module to provide light (It is possible to send an instruction from the CPU 13 through the connection indicated by the broken line 16 to the light emission controller 18 to emit flash light; col. 9, lines 38-43).

As to claim 43, Miki et al. teaches the system of claim 35, wherein the strobe module is capable of transmitting a power level of the first power supply from the second signal port to the first signal port (It is possible to supply electric power from the batteries 3 through the connection indicated by the broken line 15 to the power supply circuit 12 provided within the camera body 1; col. 9, lines 36-39).

As to claim 44, Miki et al. teaches the system of claim 35, further comprising a second power supply (secondary battery 11) in the housing of the image-capturing apparatus, the second power supply capable of supplying power to the image-capturing apparatus (col. 8, lines 43-58).

As to claim 45, Miki et al. teaches the system of claim 35, wherein the image-capturing apparatus comprises a digital camera (Fig. 1, col. 4, lines 29-30).

As to claim 46, the image-capturing apparatus of Miki et al. inherently includes the function of a digital camcorder (CCD 40 and microcomputer CPU 42).

As to claim 47, the image-capturing apparatus of Miki et al. inherently includes a storage device to store the images that are captured.

As to claim 49, Miki et al. teaches, in figure 13, an apparatus, comprising:

- means for providing light (light emitter 19);
- means for supplying power (batteries 3) to the means for providing light; and
- means for connecting and transmitting power (contact pins 2a) from the means for supplying power to an external image-capturing apparatus (col. 9, lines 36-38).

As to claim 50, Miki et al. teaches the apparatus of claim 49, wherein the means for providing light comprises a strobe module in a housing (light emitter 19 is housed in the

flash 17; Fig. 13), the strobe module capable of providing light when the image-capturing apparatus captures an image (col. 9, lines 38-43).

As to claim 51, Miki et al. teaches the apparatus of claim 49, and inherently teaches further comprising means for transforming an output voltage of the power supply into a standard voltage of the means for providing light and means for transforming the output voltage of the power supply into a standard voltage of the image-capturing apparatus (The power source of Miki et al. is connected to a power supply circuit that that in turns supplies electric power to different components of the external module; col. 5, lines 17-21).

As to claim 52, Miki et al. teaches the apparatus of claim 51, and inherently teaches wherein the means for transforming comprises a transformer in a housing of the means for providing light. (The power source of Miki et al. is connected to a power supply circuit that that in turns supplies electric power to different components of the external module; col. 5, lines 17-21).

As to claim 53, Miki et al. teaches the apparatus of claim 49, further comprising means for receiving signals from the image-capturing apparatus, the signals comprising a driving signal capable of driving the means for providing to provide light (It is possible to send an instruction from the CPU 13 through the connection indicated by the broken line 16 to the light emission controller 18 to emit flash light; col. 9, lines 38-43).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 39-41 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miki et al. (US 6,101,339).

Miki et al. discloses substantially the claimed invention as set forth in the discussion for claims 39-41.

Miki et al. does not disclose expressly wherein the connection ports comprise an I2C, UART, or USB interface. However, Examiner takes OFFICIAL NOTICE that these elements are common in the art.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure the connection ports to be an I2C, UART, or USB interface. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the contact pins taught by Miki et al. or the claimed I2C, UART, or USB interfaces because these interfaces both perform the same function of allowing an electrical connection and communication between the external strobe unit and the external image-capturing apparatus. Therefore, it would have been obvious to modify Miki et al. to obtain the invention as specified in claims 39-41.

As to claim 48, Miki et al. does not disclose expressly wherein the image-capturing apparatus comprises a phone camera. However, Examiner takes OFFICIAL NOTICE that this element is common in the art.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure the image-capturing apparatus to be a phone camera. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the digital camera taught by Miki et al. or the claimed phone camera because these devices perform the same function of capturing images. Therefore, it would have been obvious to modify Miki et al. to obtain the invention as specified in claim 48.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Watanabe et al. (US 2003/0175025 A1) discloses an image sensing apparatus and signal processing apparatus.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chia-Wei A. Chen whose telephone number is 571-270-1707. The examiner can normally be reached on Monday - Friday, 7:30 - 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NgocYen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cc
10/2/07

TUAN HO
PRIMARY EXAMINER